

**JDMLab**

Judgment and Decision-Making Laboratory  
<http://www.dpss.unipd.it/JDMLab/home>



**Psychology, Policy Making, and  
Education to a Circular Economy**

School of Science  
2023-2024

# CLASS PROGRAM AND CONTENTS

Enrico Rubaltelli, Ph. D.  
Maja Roch, Ph. D.



## WHAT YOU WILL LEARN

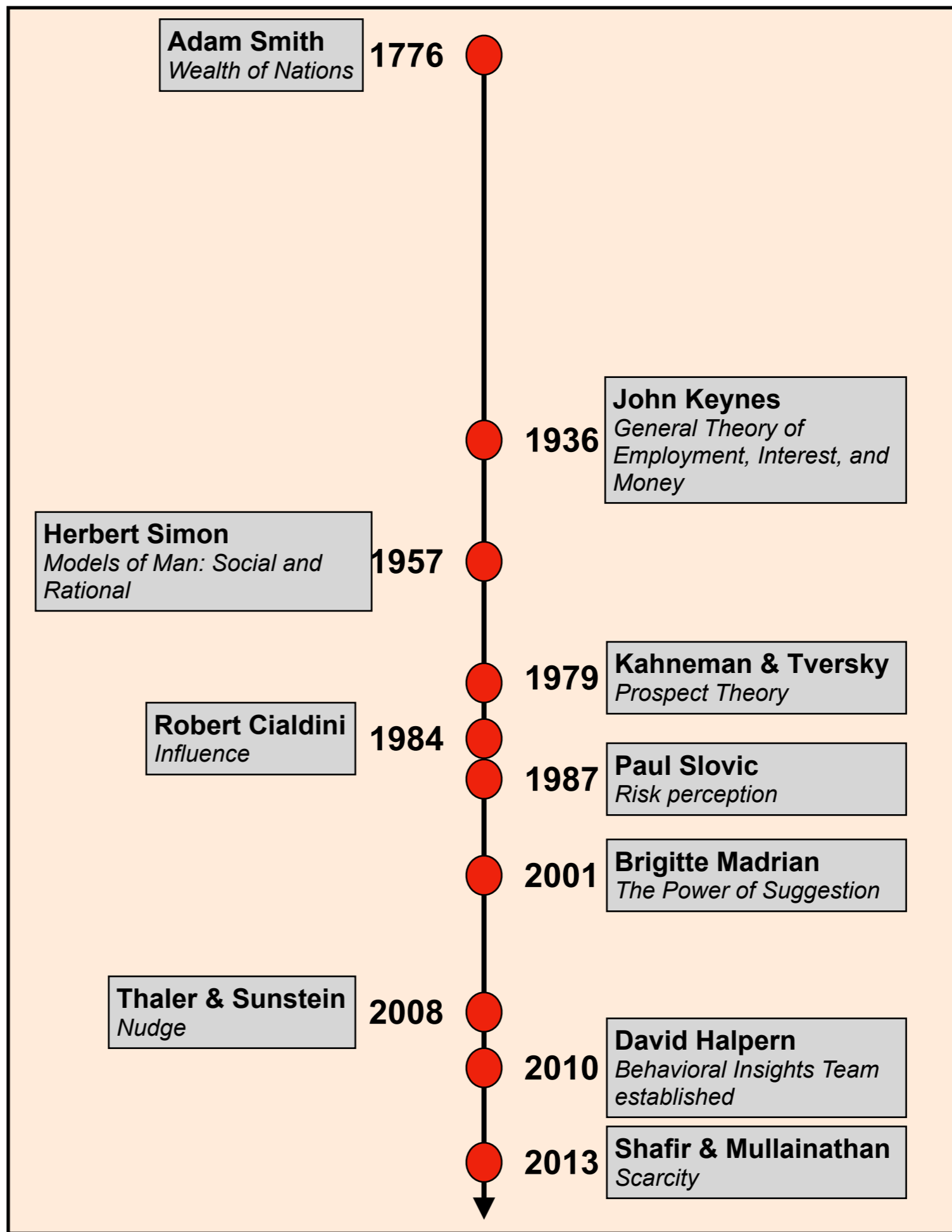
- **What drives people's behavior?**
- **How do people think and process information?**
- **How do people make decisions?**
- **When intentions translate into actual behaviors?**
- **What is risk perception?**
  
- **How can we maximize our ability to increase people's adoption of sustainable behaviors?**
- **How can we ensure people will accept/demand the socio-economic shift to circular economy?**



# MULTI-DISCIPLINARY APPROACH TO BEHAVIOR AND SUSTAINABILITY

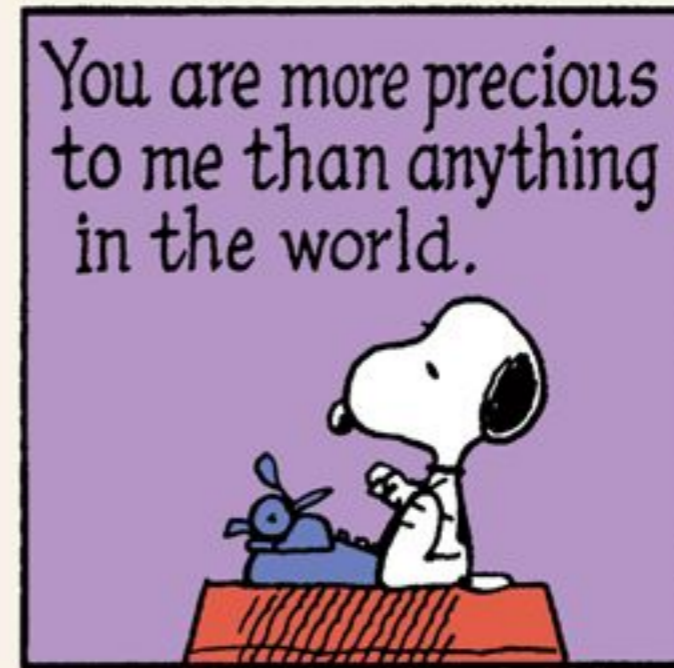
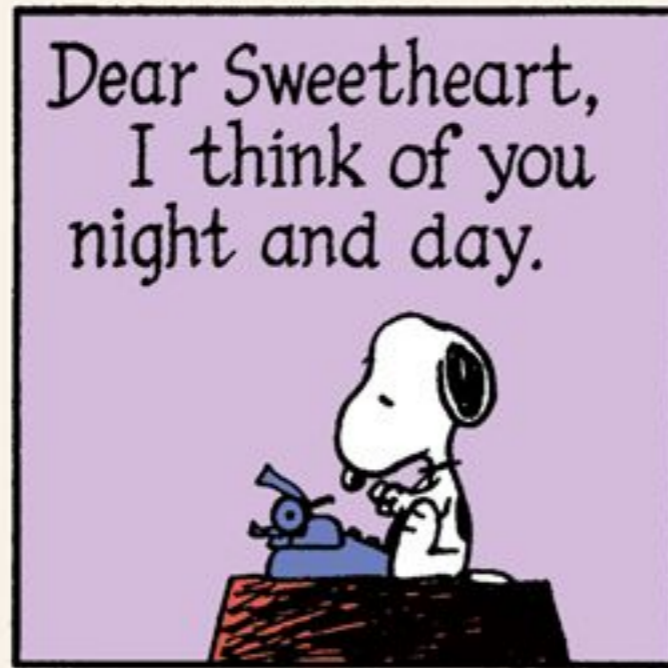
- **Psychology**
- **Economics**
- **Statistics**
- **Law**
  
- **Chemistry**
- **Engineering**
- **Physics**

# MODULE: PSYCHOLOGY AND POLICY-MAKING (NUDGES)



# DUAL-PROCESS THEORIES (INTUITIVE THINKING VS. ANALYTIC THINKING)

- a. Intuitive system vs. analytic system
- b. The role of attention in decision making
- c. Interaction between the two systems
- d. Conflict between the two systems
- e. Cognitive illusions
- f. Intuitive system vs. analytic system: Self-control and effort in decision making
- g. Following your intuitions: Mental associations
- h. Priming: Unconscious activation of concepts from memory
- i. Emotions and decisions



© PNTS

- a. Main features of Prospect Theory
- b. The “evaluation” phase: Probability weighing function and value function
- c. Framing effect
- d. Endowment effect: The value of owning something
- e. Status quo effect: Deciding not to decide
- f. Omission bias: The difference between doing and not doing





# DECISION HEURISTICS

- a. Representativeness heuristic (how we mis-perceive probabilistic and casual events)
- b. Availability heuristics (judgments about the frequency of events)
- c. Anchoring (how numerical values can disrupt our estimates)

- a. How can we help people avoid decision errors that can negatively impact all society?
- b. The “strategic use” of default rules: How to use the status quo bias to improve people’s behavior
- c. Improving people’s decisions using social norms and social comparisons
- d. How to use incentives to motivate people and help them overcome lack of self-control
- e. The BASIC framework to develop effective nudges



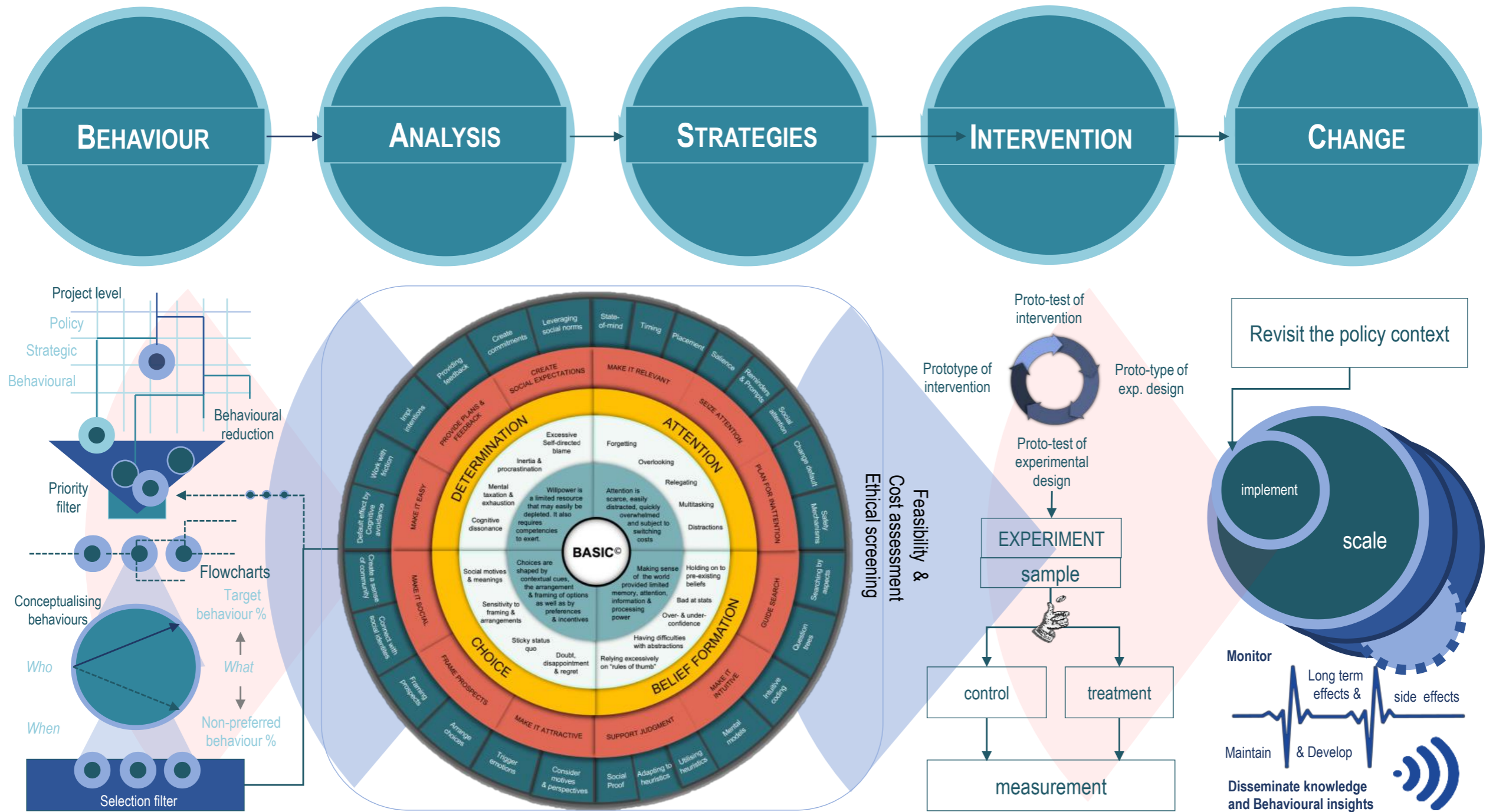
- **Class discussions:**

- How to make people aware of the global scope of the sustainability and climate change challenges humanity is facing.
- Nuclear energy.
- Carbon sequestration.

- **Group work:**

- We will create a few groups that will have to tackle a specific issue and figure out how to create policies and programs to counteract it.
- As a reference for the activities we will use the BASIC Framework (next slide):
  - To each step of the framework we will dedicate specific time in class.
  - The group work will be intertwined with class level analyses of the psychological elements at play.

Figure 2.1. The BASIC framework



- **Exam:**
  - Written essay.
  - *Evaluation:*
    - Level of learning.
    - Ability to extend the knowledge to specific case studies.